

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
22 September 2005 (22.09.2005)

PCT

(10) International Publication Number  
**WO 2005/087210 A3**

(51) International Patent Classification<sup>7</sup>: **A61K 31/07**,  
31/05, A61P 27/02

(21) International Application Number:  
PCT/DK2005/000176

(22) International Filing Date: 16 March 2005 (16.03.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
PA 2004 00431 17 March 2004 (17.03.2004) DK

(71) Applicant and

(72) Inventor: **LARSEN, Lars, Michael** [DK/DK]; Nød-  
dekrogen 6, DK-2920 Charlottenlund (DK).

(74) Agent: **HØIBERG A/S**; St. Kongensgade 59A, DK-1264  
Copenhagen K (DK).

(81) Designated States (*unless otherwise indicated, for every  
kind of national protection available*): AE, AG, AL, AM,  
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,  
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,

GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,  
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,  
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,  
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ,  
TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA,  
ZM, ZW.

(84) Designated States (*unless otherwise indicated, for every  
kind of regional protection available*): ARIPO (BW, GH,  
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,  
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,  
FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO,  
SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN,  
GQ, GW, ML, MR, NE, SN, TD, TG).

**Published:**

- with international search report
- before the expiration of the time limit for amending the  
claims and to be republished in the event of receipt of  
amendments

(88) Date of publication of the international search report:  
10 November 2005

*For two-letter codes and other abbreviations, refer to the "Guid-  
ance Notes on Codes and Abbreviations" appearing at the begin-  
ning of each regular issue of the PCT Gazette.*

(54) Title: PREVENTION OF RETINOPATHY BY INHIBITION OF THE VISUAL CYCLE

(57) Abstract: The invention relates to compounds capable of inhibiting the visual cycle and/or dark adaptation and their use for treatment and prevention of non-degenerative retinal diseases with specific emphasis on the prevention and treatment of diabetic retinopathy, retinopathy of prematurity, branch retinal vein occlusion, central retinal vein occlusion, open-angle glaucoma, neovascular glaucoma, and other diseases of the retinal and/or optic nerve where an imbalance between metabolic demand and blood supply contribute to the development of tissue damage. The invention furthermore relates to pharmaceutical compositions comprising such compounds.

WO 2005/087210 A3